POSTTRAUMATIC GROWTH INVENTORY

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- Review of available literature
- Interviews

Posttraumatic Growth Inventory

- Indicate for each of the statements below the degree to which this change occurred in your life as a result of your crisis, using the following scale.
- 0 = I did not experience this change as a result of my crisis.
- 1= I experienced this change to a very small degree as a result of my crisis.
- 2= I experienced this change to a small degree as a result of my crisis.
- 3= I experienced this change to a moderate degree as a result of my crisis.
- 4 = I experienced this change to a great degree as a result of my crisis.
- 5= I experienced this change to a very great degree as a result of my crisis.

Five Empirically Derived Factors

New Possibilities
Relating to Others
Personal Strength
Appreciation of Life
Spiritual Change

New Possibilities - 5 items

I developed new interests.

I established a new path for my life.

Relating to Others - 7 items

I more clearly see that I can count on people in times of trouble.

I have more compassion for others

Personal Strength - 4 items

I have a greater feeling of selfreliance.

I discovered that I'm stronger than I thought I was.

Spiritual Change - 2 items

I have a better understanding of spiritual matters.

I have a stronger religious faith.

Appreciation of Life - 3 items

I changed my priorities about what is important in life.

I have a greater appreciation for the value of my own life.

I can better appreciate each day.

Are Self-reports on PTGI Valid?

Self-enhancing cognitive bias--may be a factor in some reports of PTG

Are Self-reports on PTGI Valid?

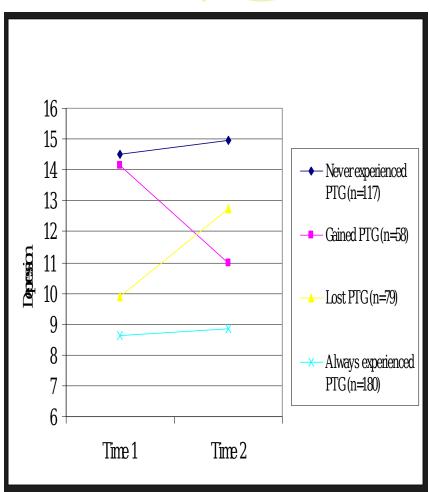
- No relationship between PTG and Social Desirability
- Trauma survivors usually report both positive and negative outcomes.
- Growth may be under-reported on PTGI
- Reports tend to be corroborated

PTGI Scores and Indices of Adjustment

Inconsistent results

A complicated pattern, if there is only one.



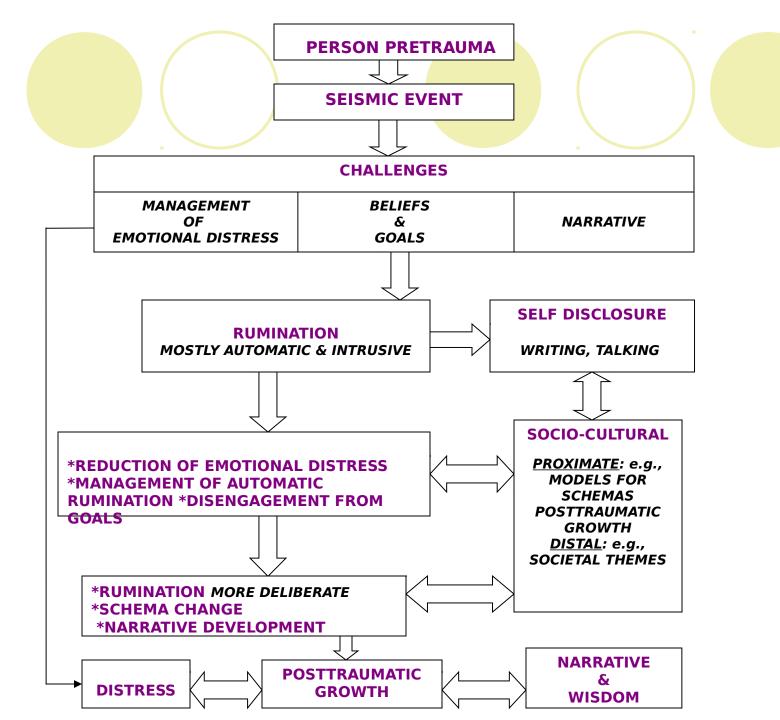




- HIV patients studied over 1.6 years
- 59% reported PTG.
- 4 patterns of PTG and depression
- (Milam, 2002)



- Perhaps PTG is related to a wisdom that reaches beyond more superficial concepts of adjustment, such as wellbeing, or lack of distress.
- Optimal psychological functioning may involve a willingness to explore existential issues, fulfillment, and virtue.



Empirical Findings: PTGI Range of Scores

- Lowest among victims of criminals in South Africa (M=40).
- Moderate among bereaved parents (M=60), WWII bombing survivors (M=69), breast cancer survivors (M=58).
- Highest among college students reporting varieties of severe trauma (M=83).

Empirical Findings: Individual differences

- Openness r = .25 with New Possibilities and Personal Strength.
- Extraversion Activity r = .31 and Positive Emotions r = .34 with PTGI.

Empirical Findings: Self-disclosure & Support/Constraint

- Breast cancer survivors (Cordova et al., 2001): Social constraint from friends and family associated with less cognitive processing and less PTG.
- Husbands of breast cancer survivors (Weiss, 2002): Social support related to acknowledgement of fear and to PTG.
- Breast cancer survivors (Antoni, et al., 2001): Emotional processing related to PTG but not optimism.

Empirical Findings: Cognitive Processing

 Frequency of rumination r = .49 with PTGI among older adults (Tedeschi, Calhoun & Cooper, 2000).

 College students instructed to process emotional aspects of trauma in their journals showed higher PTGI scores (Lutgendorf, 2002).

Recent Development: PTG in Children

- Children 6-15 reported PTG in the aftermath of hurricane flooding:
 - Rumination & Competency Beliefs r = .38.
 - Social Support & Competency Beliefs r = .35
 - Competency Beliefs & PTG r= .55.
- (Cryder, Kilmer, Tedeschi, & Calhoun, 2006)



There are reports of PTG across cultures--Israel, China, Turkey, Germany, Bosnia, Japan, Holland, Australia, Switzerland.



 Collectivistic Characteristics May Affect PTGI Scores

In North America, traditionally, the tendency is the individual resolution of the problem, conquering the wilderness, whereas in Japanese culture, a collective oriented culture, growth may come out of the group stability.

Historical, religious background may affect PTG.

Buddhism and Shinto have penetrated Japanese customs and have had a great influence on its culture. The dogma mainly emphasizes accepting everything, including trauma as it is, and the virtue stresses shouldering one's past.



Measuring Related Variables

Social Context

- None of my friends or family has ever suggested to me that facing a crisis can make you a better person.
- 2. If someone talked about how something good can come out of a really bad experience, most people I know would agree.
- 3. I have known people who experienced really tough situations and saw benefits in their difficult experience.

General Social Support

- 1. They comforted me.
- 2. They expressed interest and concern for my well-being.
- 3. They supported me.

Social Constraint

- I decided not to talk to people about my experience because I felt that they would be uncomfortable talking to me about it.
- I felt that they would prefer I keep my thoughts about my experience to myself
- I felt that they were eager to let me talk about my experience.

Desire to Self-Disclose

- I wanted to seek them out to help me deal with my experience.
- I wanted to avoid talking about my experience with them.
- I wanted to tell them how I was feeling about my experience.

Cognitive Processing/Rumination

- Soon after my experience, I thought about the event when I didn't mean to.
- Soon after the event, thoughts about the experience came into my mind and I could not stop thinking about the event.
- Soon after the event, I decided to think about the experience to try and make sense out of what happened.



- Soon after the event, I tried to make something good come out of my experience.
- Soon after the event, I reminded myself of some of the benefits that came from adjusting to the experience.
- As a result of what happened, soon after the event I found myself automatically thinking about the purpose of my life.
- As a result of what happened, soon after the event I deliberately would think about and ask questions about whether or not life has a meaning or purpose.

Core Beliefs Challenge

- My experience has led me to seriously examine...
 - the degree to which things that happen to people are fair.
 - the degree to which things that happen to people are controllable.
 - my assumptions concerning why other people think and behave the way that they do.
 - o my relationships with other people.



- omy sense of my abilities, strengths and weakness.
- omy expectations for my future.
- the meaning of my life.
- omy spiritual or religious beliefs.
- omy own value or worth as a person.

Assumptions and Predictions

- It's not the trauma, it's the struggle.
- People first struggle to survive, not grow.
- Psychological fitness and PTG: It's curvilinear?
- Illusions: Yes and No.
- PTG and distress coexist.
- There are various routes to growth.

Subtleties of Cognitive Processing

- Intrusive thinking
- Non-intrusive repetitive thinking
- Deliberate meaning-making
- Positive reinterpretation
- Benefit reminding
- Timing: immediately after the trauma or later?

PTG domains, types of processing, and timing

- Bereaved parents (Calhoun, Tedeschi, Fulmer, & Harlan, 2000): sensitivity to types of processing at points in time.
- Intrusive thinking not related to PTG.
- Repetitive thinking immediately r=.48 with Personal Strength.
- Deliberate meaning-making immediately r=.48 with PTGI (all domains except Personal Strength).
- Positive reinterpretation and benefit-reminding recently r=.36/.44 with PTGI, through New Possibilities (r=.55/.55) and Appreciation of Life (r=.46/.36) only.

PTG and Trauma Events

- Participants reported experiencing an average of 2.62 traumatic events with 66% reporting experiencing multiple traumas.
- Greater PTG was related to a greater number of traumatic events reported in the last five years, more recent traumatic events, and higher levels of distress at time of traumatic event (Wild & Paivio, 2003).

Trauma "Pile-ups"

- Compared >1 event within a month with single and multiple traumas.
- More stressful events the higher the PTG score.
- Participants reporting two or more events had significantly higher scores on the Core Beliefs Scale, Impact of the Event, and General Health Questionnaire than participants reporting a single event.
- No significant effects were found on the pile-up of losses and the PTGI, IES-R, CBS or RI. The pile-up group reported higher scores on the GHQ than single event group.

Cross-cultural study

- 312 (124 males, 188 females), Japanese university students who reported their most traumatic/ stressful life event in life.
- The results showed the PTGI-J has high internal consistency and, of the original five PTGI factors Relating to Others, New Possibilities, Personal Strength, and a fourth factor combining Spiritual Change and Appreciation of Life.



- Contrary to previous studies in Western countries, the averages of some items were relatively low, especially for the item "I have a stronger religious faith."
- In this study, the events reported by participants included what appear to be Japanese specific crises that are related to a sense of guilt, such as "betrayed someone's trust", "hurt someone unintentionally" and failure on highly important university admission exams.